

CALIFORNIA INSTITUTE OF TECHNOLOGY  
PASADENA

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May 19, 1944

Professor R. A. Millikan  
California Institute of Technology  
Pasadena 4, California

Dear Professor Millikan:

During the past four years the California Institute of Technology has received several grants from The Rockefeller Foundation for the support of research in the field of immunology. Some of this work has been done in the Division of Biology under the direction of Professor A. H. Sturtevant, and some in the Division of Chemistry and Chemical Engineering under my direction. The grants which have been made are the following: A grant of \$12,000 for the period 1940-1943 for work in serological genetics; a grant of \$33,000 (\$11,000 per year) for the period 1941-1944 for work in immunochemistry; a special grant of \$20,000 for the year 1942-43 for work on the artificial manufacture of antibodies; and a grant of \$13,000 for 1943-1944.

The researches in immunology supported by these grants have progressed very well during the past year. Both Professor Sturtevant and I are confident that effort in this field will continue to yield very valuable results. Under normal circumstances we would be prepared now to propose a program of joint biological and chemical attack on the problems of immunology and of application of immunological techniques to the problems of biology and chemistry to be carried out during a period of years in the immediate future. Because of the war, however, it does not seem wise for this extended program to be proposed and considered at the present time. We are accordingly recommending that our program of research in immunology be carried out for another year on a scale slightly contracted over that of the present year.

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I submit herewith to you our proposed joint program of immunological research, with a budget for the year July 1, 1944 to June 30, 1945 of \$19,000. This is \$5,000 less than the total budget for the present year. Of the sum of \$19,000, \$5,500 is for the support of researches in immunology to be carried out in the Division of Biology, and \$13,500 for the support of work in immunochemistry to be carried out in the Division of Chemistry and Chemical Engineering. There is, of course, a considerable amount of collaboration between the workers in the two Divisions.

May I request that application be made to The Rockefeller Foundation for a grant of \$19,000 for the support of this program of research in immunology?

I wish to mention that it is my opinion that it is well worth while to continue these researches in war time. Dr. A. M. Richards, Chairman of the Committee on Medical Research of the Office of Scientific Research and Development, has acted as sponsor for the project, and has written letters expressing his opinion that the work is of value to the Nation. Two promising direct contributions to the war effort have already been made on the basis of the work under the Rockefeller grants. One of these, relating to the manufacture of a blood substitute by the polymerization and oxidation of protein molecules by chemical treatment, has been developed under an OSRD contract; the second development is classified as secret.

Attached to this letter are two copies of a report on the work in immunochemistry carried on during the year 1943-1944 in the Division of Chemistry and Chemical Engineering, and two copies of a report on the work

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in immunology carried on in the Division of Biology. One copy of each report is for your files, and one copy may be sent with the application to The Rockefeller Foundation.

I can not refrain from taking this opportunity to tell you how strongly I feel about the promise of our joint program of work in immunology as a most productive field of research. I am confident that our present and projected program will not only continue to provide very interesting contributions to pure science, but will in the course of time also lead to results of practical value in the field of medicine. It is my hope that in the not too distant future the California Institute of Technology will extend the field of its research activities to cover not only the fundamental sciences of physics, chemistry, and biology, but also human physiology and sub-clinical medicine, with special attention to the application to these latter fields of new concepts and techniques in the fundamental sciences.

Sincerely yours,

Linus Pauling

LP:jr  
Enclosures